

AMENDMENT TO THE CLAIMS

1. (Currently Amended): A system for handling data requests from mobile devices, the system comprising:

a memory operable to store data requests received from at least one mobile device;

a state prediction module operable to access the memory and predict a first forecasted data request for a mobile device based on the stored data requests; and

a push module operable to receive the first forecasted data request from the state prediction module and in response request and receive first response data related to the first forecasted data request and push the first response data to the mobile device over a wireless network, the pushing being performed on a periodic basis and independent of receiving a data request from the mobile device;

wherein the periodic basis at which the first response data is pushed to the mobile device is determined based on a time period during which a user of the mobile device has repeatedly requested the stored data requests such that the first response data is pushed to the mobile device prior to an expected new request from the user during this time period;

wherein the mobile device is configured to transmit a successful prediction notification to the state prediction module indicating that the user has made the stored data request during the time period.

Claims 2-6 (Canceled)

7. (Previously Presented): The system of claim 1, wherein the state prediction module is operable to select prediction modes according to the identified subset of stored data.

8. (Original): The system of claim 7, wherein the prediction modes comprise:

an atomic mode that operates on stored data requests specific to the identity of the mobile device;

and a group mode that operates on stored data requests specific to a plurality of mobile devices.

9. (Previously Presented): The system of claim 1, wherein the state prediction module is operable to predict the first forecasted data request based on a Markov chain model.

Claims 10-20. (Canceled)

21. (Currently Amended) A method for use with a communication device by which a user requests data from a server via a network and receives the requested data from the server via the network, the method comprising the following steps in the following order:

predicting, by the server, what data the user will request, based on historical requests for the data;

pushing, by the server, the data to the device on a periodic basis without the user or the device first requesting the data, wherein the periodic basis is determined based on a time period during which the user has repeatedly requested the data such that the data is pushed to the device prior to an expected new request from the user during this time period;

storing, by the device, the data until the data is requested by the user; and
presenting, by the device, the stored data to the user if and when the user requests the data; and
transmitting, by the mobile device, a successful prediction notification to the state prediction module indicating that the user has made the stored data request during the time period.

22. (Previously Presented) The method of claim 21 further comprising, after the presenting step:

sending, by the device to the server, an indication of whether the user requested the stored data.

23. (Previously Presented) The method of claim 21 further comprising, before the pushing step:

assessing the cost effectiveness of pushing the data to the device without having first received a request for the data from the user.

24. (Previously Presented) The method of claim 21 wherein, in the storing step, the data is stored along with an indication of when the data should be updated.

25. (Previously Presented) The method of claim 21 wherein the predicting step predicts the data being requested at a particular time of day, and the pushing step is performed in response to that time of day arriving and not in response to receiving a request from the user.

26. (Previously Presented) The method of claim 21 wherein the network includes the Internet.

27. (Previously Presented) The method of claim 21 wherein the data comprises a web page.

28. (Previously Presented) The method of claim 21 wherein the communication device is a mobile device.

29. (Currently Amended) A method for use with a communication device by which a user requests data from a server via a network and receives the requested data from the server via the network, the method comprising the following steps in the following order:

predicting, by the server, what data the user will request, based on historical requests for the data;

sending, by the server to the device, the data to the device on a periodic basis, wherein the periodic basis is determined based on a time period during which the user has repeatedly requested the data such that the data is sent to the device prior to an expected new request from the user during this time period;

storing, by the device, the data until the data is requested by the user;

presenting, by the device, the stored data to the user if and when the user requests the data; and

~~informing the server, by the device, whether the user requested the stored data~~

transmitting, by the mobile device, a successful prediction notification to the state prediction module indicating that the user has made the stored data request during the time period.

30. (Previously Presented) The method of claim 29 wherein the predicting step is performed based on a stored list of web pages and their respective assigned probabilities of being requested by the user, and the method further includes:

in response to receiving an notification that the user did not request the stored data, lowering the assigned probability for the stored data's web page.

31. (Previously Presented) The method of claim 29 wherein the predicting step takes into account the cost effectiveness of pushing the data in determining which data to send in the sending step.

32. (Currently Amended) A method for use with a communication device by which a user requests data from a server via a network and receives the requested data from the server via the network, the method comprising the following steps in the following order:

predicting, by the server, that a user will request particular data at a particular time of day, based on historical requests for the data made by the user at this particular time of day;

sending, by the server, the data to the device in response to arrival of the time of day such that the data is sent to the device prior to an expected new request from the user during this particular time of day;

storing, by the device, the data until the data is requested by the user; ~~and~~

presenting, by the device, the stored data to the user if and when the user requests the data; and

transmitting, by the mobile device, a successful prediction notification to the state prediction module indicating that the user has made the stored data request during the time period.

33. (Previously Presented) The method of claim 32 further comprising repeating the sending and storing steps periodically.

34. (Canceled)

35. (Previously Presented) The system of claim 9 wherein the Markov chain model is based on a historic states pattern.

36. (Previously Presented) The system of claim 9 wherein the Markov chain model is based on a maximum number of information units that is time and/or price efficient to direct to the mobile device during one push.

37. (Canceled)

38. (Previously Presented) The system of claim ~~37~~ 1, wherein the state prediction module is configured to update a prediction algorithm based on whether or not the successful prediction notification is received from the mobile device.